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Michael Borella

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EXAMINER

NICKERSON, JEFFREY L

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/840,083	Applicant(s) BORELLA ET AL.	
	Examiner JEFFREY NICKERSON	Art Unit 2442	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29,33,35-49 and 66-85 is/are pending in the application.
- 4a) Of the above claim(s) 43-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29,33,35-42 and 66-85 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to Application No. 10/840,083 filed on 05 May 2004. The request for continued examination presented on 20 August 2010, which amends claims 1, 4, 29, 66, and 76, and presents arguments, is hereby acknowledged. Claims 1-29, 33, 35-49, and 66-85 are currently pending; claims 1-29, 33, 35-42, and 66-85 have been examined; claims 43-49 remain withdrawn from consideration.

35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim Rejections

3. Claims 76-85 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 76, this claim is directed towards "a tangible computer readable medium." A claim directed towards such a "medium", is not statutory if applicant does not specifically define the phrase in their specification as being only non-transitory mediums. The phrase therefore encompasses mediums such as signal waves over air or water, which is non-statutory subject matter, and the claim is therefore directed to non-statutory embodiments. Please see the Subject Matter Eligibility memo, dated 27

Art Unit: 2442

January 2010 on the USPTO website for further information:

http://www.uspto.gov/patents/law/notices/101_crm_20100127.pdf

Regarding claims 77-85, these claims do not cure the deficiencies of their parent claim(s) and thus inherit the rejection.

35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Response to Arguments

5. Applicant's claim amendments and arguments, filed in the response dated 20 August 2010, regarding the rejections under 35 USC 103(a) have been fully considered and are at least persuasive-in-part. All outstanding rejections under 35 USC 103(a) are hereby withdrawn. However, new rejections may appear below.

Claim Rejections

6. Claims 1, 3, 7-9, 11-17, 21-22, 24-29, 35-42, 66, 68-76, and 78-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsirtsis et al (US 6,954,442 B2);

Art Unit: 2442

and in further view of Denman et al (US 7,170,863 B1), and Crockett et al (US 2003/0154243 A1).

Regarding claim 1, Tsirtsis teaches a system (Tsirtsis: abstract; Figures 3-7), comprising:

- a first proxy (access node), configured to support routing of communications for a first plurality of clients in the first region (Tsirtsis: Figure 3, items 300 and 200);

- a second proxy, configured to support routing of communications for a second plurality of clients in a second region (Tsirtsis: Figure 3, items 300' and 200'); and

- a third proxy, configured to support routing of communications between the first proxy and the second proxy (Tsirtsis: Figure 3, item 334; See also col 6, lines 43-63; col 10, lines 13-40); and

- wherein routing devices are proxies; and wherein the proxies are SIP proxies (Tsirtsis: col 9, lines 35-54).

Tsirtsis does not teach wherein the communications comprise push-to-talk communications;

- wherein the routing device stores a value of a local domain for the first region;

- wherein a first client of the first plurality of clients is configured to register with the second routing device and optionally with the first routing device;

- wherein the first routing device is further configured to determine whether the first client is registered with the first routing device, and, in response to determining that the first client is registered with the first routing device:

determine whether or not a push-to-talk communication is local to the first region based on the stored value of the local domain, set up a push-to-talk communication in the first region responsive determining the push-to-talk communication is local, and set up the push-to-talk communication in the second region responsive to determining the push-to-talk communication is not local; wherein, in response to a determination that the first client is registered with the first routing device and is registered with the second routing device, the second routing device is configured to set up the communication in the second region.

Denman, in a similar field of endeavor, teaches wherein the communication comprises PTT communications (Denman: abstract; Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Denman for having a PTT server. The teachings of Denman, when implemented in the Tsirtsis system, will allow one of ordinary skill in the art to implement PTT servers in each of the networking areas. One of ordinary skill in the art would be motivated to utilize the teachings of Denman in the Tsirtsis system in order to provide support for a user-liked service and entice new customers.

The Tsirtsis/Denman system does not teach wherein the routing device stores a value of a local domain for the first region; or

wherein a first client of the first plurality of clients is configured to register with the second routing device and optionally with the first routing device;

wherein the first routing device is further configured to determine whether the first client is registered with the first routing device, and, in response to determining that the first client is registered with the first routing device:

determine whether or not a push-to-talk communication is local to the first region based on the stored value of the local domain, set up a push-to-talk communication in the first region responsive determining the push-to-talk communication is local, and set up the push-to-talk communication in the second region responsive to determining the push-to-talk communication is not local;

wherein, in response to a determination that the first client is registered with the first routing device and is registered with the second routing device, the second routing device is configured to set up the communication in the second region.

Crockett, in a similar field of endeavor, teaches wherein a first client of the first plurality of clients is configured to register with the second routing device and optionally the first routing device (Crockett: [0058]-[0065] provides for clients registering with their respective regional dispatcher; [0066]-[0067] provides registrations with home dispatcher; [0097]-[0099]);

wherein the first routing device is further configured to determine whether the first client is registered with the first routing device (Crockett: [0104] provides for identifying a target user is locally registered), and,

in response to determining that the first client is registered with the first routing device: determine whether or not the communication is local to the first region based on stored values, set up a communication in the first region responsive to determining the

Art Unit: 2442

communication is local, and set up the communication in the second region responsive to determining the communication is not local (Crockett: [0105] provides for determining if call should be locally hosted, even if one target user is locally registered; for instance, even if first target user is registered and determined as local, if majority of users and thus the communication isn't going to be local, the setup may divert to another region);

wherein, in response to a determination that the first client is not registered with the first routing device and is registered with the second routing device, the second routing device is configured to set up the communication in the second region (Crockett: [0120]-[0122] provides for setting up call hosting in second region if target user is not registered at same regional dispatcher but instead at different regional dispatcher); and

wherein communications are based on the stored value of the local domain (Crockett: [0070] provides for determining respective regional dispatcher based on domain of the SIP uri).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Crockett for determining which region to setup a PTT based on SIP registrations and locations of target users. The teachings of Crockett, when implemented in the Tsirtsis/Denman system, will allow one of ordinary skill in the art to setup a PTT communication in a best-fit region based on where the majority of target users will be. One of ordinary skill in the art would be motivated to utilize the teachings of Crockett in the Tsirtsis/Denman system in order to minimize time of processing for setting up PTT communications, and to reduce network delays and latency by choosing optimal call hosting device based on target user location.

Regarding claim 3, the Tsirtsis/Denman/Crockett system teaches wherein determining the push-to-talk communication is local comprises determining that a called party specified in a request for push-to-talk communication is local (Maeno: col 12, lines 27-51 and Figure 22 for determining if destination is local; Denman for PTT and destination being called party).

Regarding claim 7, the Tsirtsis/Denman/Crockett system teaches wherein either the first region, the second region, or both the first region and the second region correspond to a wireless coverage area (Tsirtsis: col 5, lines 21-34).

Regarding claim 8, the Tsirtsis/Denman/Crockett system teaches wherein a wireless coverage area as corresponds to the first region at least partially overlaps with a wireless coverage area as corresponds to the second region (Tsirtsis: col 4, lines 50-56).

Regarding claim 9, the Tsirtsis/Denman/Crockett system teaches a wireless coverage area as corresponds to the first region and a wireless coverage areas as corresponds to the second region, and handing off therebetween (Tsirtsis: col 4, lines 50-56).

Tsirtsis/Denman/Crockett does not explicitly recite that coverage areas can't overlap.

Art Unit: 2442

One of ordinary skill in the art, at the time the invention was made, would reasonably recognize that there are a finite number of options when it comes to identifying how coverage areas inter-relate to one another with respect to an overlapping trait. Coverage areas can either overlap or they can not overlap. One of ordinary skill in the art would readily recognize the benefits and detriments of either scenario, such as: overlapping allows continuous communication at the expense of smaller overall coverage; non-overlapping allows larger overall coverage at the expense of non-continuous communication when traveling between areas. Given that there are a finite number of options with regard to overlapping-ness of coverage areas, with recognizable and predictable outcomes as indicated above, it would be obvious to one of ordinary skill in the art to use either technique in any particular system based on the system's particular needs.

Regarding claim 11, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy is configured to support SIP compression (Denman: col 13, lines 47-50).

Regarding claim 12, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy is configured to support SIP compression to thereby improve airlink utilization (Denman: col 13, lines 47-50).

Art Unit: 2442

Regarding claim 13, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy comprises a first hop SIP proxy with respect to a given client in the plurality of clients (Tsirtsis: Figure 3); and

wherein the given client is a PTT client (Denman: abstract).

Regarding claim 14, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy is configured to support PTT styled communications for roaming PTT clients in the first region (Tsirtsis: Figure 9; Denman: abstract).

Regarding claim 15, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy is configured to support inter-region PTT communications between PTT clients that are located in different regions (Tsirtsis: Figure 6; Denman: abstract).

Regarding claim 16, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy further supports presence service (Tsirtsis: Figure 3, items 210; col 8, lines 4-13).

Regarding claim 17, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy further supports presence service for at least some of the first plurality of clients (Tsirtsis: Figure 3, items 210; col 8, lines 4-13).

Art Unit: 2442

Regarding claim 21, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy further comprises authentication and registration means for facilitating authentication of the first plurality of clients (Tsirtsis: col 9, lines 5-18; abstract); and wherein at least some of the first plurality of clients are PTT clients (Denman: abstract).

Regarding claim 22, the Tsirtsis/Denman/Crockett system teaches wherein the authentication and registration means are further for serving as a registrar for mobile clients (Tsirtsis: abstract).

Regarding claim 24, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy further comprises routing means for making routing decisions for SIP messages as are provided thereto (Tsirtsis: col 9, lines 35-54).

Regarding claim 25, the Tsirtsis/Denman/Crockett system teaches wherein the routing means facilitate routing decisions in conjunction with a directory server (Tsirtsis: Figure 8, item 1300; col 16, line 54 – col 17, line 6).

Regarding claim 26, the Tsirtsis/Denman/Crockett system teaches wherein the routing means make the routing decisions for all SIP messages as are provided thereto (Tsirtsis: col 9, lines 35-54).

Art Unit: 2442

Regarding claim 27, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy further comprises compression means for compressing and decompressing SIP traffic to and from a corresponding one of the PTT clients (Denman: col 13, lines 47-50).

Regarding claim 28, the Tsirtsis/Denman/Crockett system teaches wherein the first SIP proxy further comprises presence means for supporting presence within the system, at least in part, by supporting SIP/SIMPLE messages (Denman: Figure 6, subscribe and notify messages).

Regarding claim 29, this method claim contains limitations corresponding to that of claim 1 and the same rationale of rejection is used, where applicable.

Regarding claim 35, the Tsirtsis/Denman/Crockett system teaches wherein the SIP message facilitates a PTT communication for the first client further comprises a SIP message facilitating a wireless PTT communication for the first client (Tsirtsis: abstract; col 7, lines 40-57; Denman: abstract).

Regarding claim 36, the Tsirtsis/Denman/Crockett system teaches wherein the SIP message facilitating a PTT communication for the first client further comprises a SIP message facilitating a wireline PTT communication for the first client (Denman: col 12, lines 5-14).

Art Unit: 2442

Regarding claim 37, the Tsirtsis/Denman/Crockett system teaches further comprising upon receiving the SIP message from the first client, automatically authenticating the first client via the at least one SIP proxy (Tsirtsis: Figure 3, items 208; col 9, lines 5-17).

Regarding claim 38, the Tsirtsis/Denman/Crockett system teaches wherein automatically authenticating the first client comprises using an authentication server (Tsirtsis: Figure 3, items 208; col 9, lines 5-17).

Regarding claim 39, the Tsirtsis/Denman/Crockett system teaches further comprising: in response to receiving the SIP message from the first client, automatically decompressing the SIP message (Denman: col 15, lines 28-37).

Regarding claim 40, the Tsirtsis/Denman/Crockett system teaches further comprising compressing the SIP message from the first client to generate a compressed SIP communication (Denman: col 15, lines 28-37).

Regarding claim 41, the Tsirtsis/Denman/Crockett system teaches further comprising sending the compressed SIP communication (Denman: col 15, lines 28-37).

Regarding claim 42, the Tsirtsis/Denman/Crockett teaches further comprising upon receiving the SIP message from the first client, automatically publishing presence information about the first client (Tsirtsis: col 8, lines 4-13; col 8, line 46 – col 9, line 4).

Regarding claims 66, 68-76, and 78-85, these claims correspond to that of claims 29 and 35-42 and are rejected under the same rationale, where applicable.

7. Claims 2, 5, 18-20, 33, 67, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsirtsis et al (US 6,954,442 B2); in view of Denman et al (US 7,170,863 B1) and Crockett et al (US 2003/0154243 A1); and in further view of Koskelainen et al (US 7,418,509 B2).

Regarding claim 2, the Tsirtsis/Denman/Crockett system does not teach wherein the first SIP proxy comprises at least two SIP proxies.

Koskelainen, in a similar field of endeavor, teaches wherein the first SIP proxy (Koskelainen: Figure 1, item 14) comprises at least two SIP proxies (Koskelainen: Figure 1, items 14 and 20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Koskelainen for nesting SIP servers. The teachings of Koskelainen, when implemented in the Tsirtsis/Denman/Crockett system, will allow one of ordinary skill in the art to nest SIP proxies in telecomm regions as necessary. One of ordinary skill in the art would be motivated to utilize the teachings of Koskelainen in the Tsirtsis/Denman/Crockett system in order to reduce loads at a single server.

Art Unit: 2442

Regarding claim 5, the Tsirtsis/Denman/Crockett/Koskelainen system teaches further comprising a PTT server (Denman: Figure 1); and

wherein the PTT server is operably connected to the at least two SIP proxies (Koskelainen: Figure 1, items 14 and 20 as Denman's IMS).

Regarding claim 18, the Tsirtsis/Denman/Crockett/Koskelainen system teaches wherein the first region comprises a plurality of PTT service domains each having a corresponding uniform resource identifier domain name (Koskelainen: Figure 1, Figure 3).

Regarding claim 19, the Tsirtsis/Denman/Crockett/Koskelainen system teaches wherein the first region comprises a first PTT service domain of a PTT service, wherein the PTT service comprises a plurality of PTT service domains that includes the first PTT service domain, and wherein each of the plurality of PTT service domains is configured to be identified by a corresponding URI domain name (Koskelainen: Figure 3).

Regarding claim 20, the Tsirtsis/Denman/Crockett/Koskelainen system teaches wherein the user identifiers for the first plurality of clients have at least one of a domain name and a sub-domain name that is distinct from any domain name and sub-domain name, respectively, as is assigned to any network component (Koskelainen: Figure 3).

Art Unit: 2442

Regarding claim 33, the Tsirtsis/Denman/Crockett/Koskelainen system teaches wherein the first SIP proxy comprises a plurality of SIP proxies (Koskelainen: Figure 1); and

wherein the first region comprises a plurality of PTT domains (Koskelainen: Figure 3) and further comprising assigning at least some of the plurality of SIP proxies to different PTT domains in the plurality of PTT domain (Koskelainen: Figure 3).

Regarding claims 67 and 77, these claims correspond to that of claim 33, and the same rationale of rejection is used, where applicable.

8. Claims 4, 6, 10, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsirtsis et al (US 6,954,442 B2); in view of Denman et al (US 7,170,863 B1), and Crockett et al (US 2003/0154243 A1); and in further view of Gallant (US 2002/0165969 A1).

Regarding claim 4, the Tsirtsis/Denman/Crockett does not teach further comprising:

wherein the at least one client in the first plurality of clients is enabled with a first user identifier and a second user identifier, wherein the first user identifier is a standard SIP uniform resource identifier and the second user identifier is a telecommunications URI, and wherein the at least one client is able to use the first user identifier and the second user identifier interchangeably.

Gallant, in a similar field of endeavor, teaches Gallant system teaches wherein the at least one client in the first plurality of clients is enabled with a first user identifier

Art Unit: 2442

and a second user identifier (Gallant: Figure 3), wherein the first user identifier is a standard SIP URI (Gallant: Figure 3, JDoe@com.com) and the second user identifier is a telecommunications URI (Gallant: [0008]; Figure 3, item 304); and wherein at least one client is able to use the first user identifier and the second user identifier interchangeably (Gallant: abstract; [0071]-[0076]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Gallant for a proxy performing user aliasing. The teachings of Gallant, when implemented in the Tsirtsis/Denman/Crockett system, will allow one of ordinary skill in the art to have each proxy resolve both "to" and "from" user aliasing. One of ordinary skill in the art would be motivated to utilize the teachings of Gallant in the Tsirtsis/Denman/Crockett system in order to reduce user confusion by automating the manipulation of multiple account identifiers and to make AAA more efficient.

Regarding claim 6, the Tsirtsis/Denman/Crockett/Gallant system teaches wherein at least some of the second plurality of clients each have a plurality of differing user identifier and, wherein, for at least one of the second plurality of clients, at least two of the plurality of differing user identifiers correspond to a same communication service (Gallant: Figure 3; abstract; [0071]-[0076]).

Art Unit: 2442

Regarding claim 10, the Tsirtsis/Denman/Crockett/Gallant system teaches further comprising a fourth SIP proxy dedicated, at least in part, to supporting routing of communications for a third plurality of clients in a third region (Tsirtsis: Figures 3-7);

wherein at least some of the third plurality of clients each have a plurality of differing user identifiers (Gallant: Figure 3, abstract; [0071]-[0075]); and

wherein, for at least one of the third plurality of clients, at least two of the plurality of differing user identifiers each corresponds to a same communication service (Gallant: Figure 3; abstract; [0071]-[0075]; [0052]-[0054]).

Regarding claim 23, the Tsirtsis/Denman/Crockett/Gallant system teaches wherein the authentication and registration means are further for accommodating a PTT client that presents either of at least two different available-to-the-client URIs (Gallant: abstract; [0071]-[0076]).

Citation of Pertinent Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Costa-Requena et al (US 2004/0193725 A1) discloses a system that determines optimal routing based on addressing policies.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY NICKERSON whose telephone number is (571)270-3631. The examiner can normally be reached on M-Th, 9:00am - 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. N./
Examiner, Art Unit 2442

/KEVIN BATES/
Primary Examiner, Art Unit 2456